Message

From: albert.simkins@maryland.gov [albert.simkins@maryland.gov]
Sent: 8/1/2017 12:08:16 PM
To: Pena-Molina, Ana [pena-molina.ana@epa.gov]
CC: Ed Hammerberg -MDE- [ed.hammerberg@maryland.gov]; Shuster, Kenneth [Shuster.Kenneth@epa.gov]
Subject: Re: ORCR Project regarding OB/OD site in Maryland

Ms. Pena-Molina

I have prepared the following in response to your questions regarding the University of Maryland burn pit.

1. Did these sites complete clean closure or are they still in the process of seeking to clean close?

The University of Maryland completed clean closure of the open burn area in November 1999.

2. Did the state officially certify/approve the unit(s) Clean Closed (CC)?

Closure was approved by MDE in January 2000.

3. What was the volume of waste disposed, frequency (e.g., daily, weekly, monthly, periodically), and years of operation?

The burn pit was authorized to operate under interim status and a permitted unit from the early 1980's until the late 1990's. It was operated on an intermittent basis. There are not any records of the unit being used after 1991. The burn pit was constructed of a four foot diameter reinforced concrete pipe. The concrete pipe was six feet high with a six inch thick reinforced concrete base. Materials to be burned were placed on a steel grate located about eight inches above the pit floor. An eight inch diameter corrugated metal pipe entered the concrete structure at the bottom to ensure adequate air for combustion.

The burn pit was used to burn hazardous waste that could not be safely transported to a permitted waste facility. Typical materials that could be included picric acid, various unstable and reactive peroxide and nitro- containing compounds, ethers, tetrahydro furan contaminated with high levels of unstable peroxides, and hydrazine.

From 1984 to 1991, approximately 1,700 pounds of waste was burned. There are not any records of the burn pit being used after 1991.

4. Was it OB or OD or both?

OB

5. What sampling procedures were used to identify the extent of the contamination, including kick-out and fallout (e.g., geophysical techniques used to identify buried munitions and fragments; trenching; grid, spokes, meandering way, visual, or random sampling of soil/for kick-out; depth; until no more found; and ground water monitoring)?

Neither kick-out or fallout were measured. The unit was not used for treating munitions.

6. Were components of the unit removed (e.g., any platforms, pans, pads, and liners)?

The burn pit and its components were broken up and disposed of as non-hazardous waste in a solid waste landfill.

7. What clean-up procedures and techniques were used to clean up the contaminants (e.g., excavation, soil sifting)?

The walls and floors were hand scrubbed with bristle brushes using an alkaline detergent. This was followed by a high powered pressure spray. The rinse water was pumped out of the burn pit and then sampled. The interior surfaces of the burn pit was considered clean when the rinse water contained less than 10 times the maximum contaminant limit of 14 target analytes of EPA Method 8330. After the pit was decontaminated, a hole was drilled through the bottom of the burn pit floor. A soil sample was taken approximately two feet below the bottom of the floor. An addition soil sample was taken at the base of the corrugated metal air supply pipe. Soils were tested for total petroleum hydrocarbons (TPH) by EPA Method 8015 and explosives by EPA Method 8338.

8. What data was recorded and metrics used to evaluate the extent and levels of contamination?

The only sampling of burn pit area was conducted during closure. Sampling was limited to the two soil samples and the pit rinsate water.

9. What criteria was used to certify clean closure (e.g., EPA action levels)?

EPA Region III Risk Based Concentration levels were used as the basis for clean closure.

10. What was the total cost to achieve Clean Closed (CC) status?

The 1995 closure cost estimate was $14,953.00. We do not have information on what the actual expenditures were.

If you have any questions please contact me at (410) 537-3402 or albert.simkins@maryland.gov.

Albert Simkins

Maryland Department of the Environment

Resource Management Program

On Mon, Jul 17, 2017 at 3:43 PM, Pena-Molina, Ana <pena-molina.ana@epa.gov> wrote:

I am writing to seek information on the closure status of the Open Burn/Open Detonation (OB/OD) units listed below to assist ORCR in a new project to assess closure of OB/OD units. With this information, EPA will be able to identify, evaluate, and document procedures, techniques, and criteria to assess, clean up, and close OB/OD units/sites in a standardized manner.

EPA has been documenting soil and ground water contamination from OB/OD units and the costs to clean them up. Given the inordinate extent of contamination and costs of clean-up that have been reported, we are now seeking to learn more about the monitoring, clean-up procedures, successes, and costs of these efforts. There is currently no national guidance on procedures to assess, monitor, and clean up OB/OD sites, nor metrics to achieve clean closure of OB/OD units. We are requesting information on the clean closure (CC) of OB/OD sites to assist us.

Please first verify the following codes for your appropriate facility in Maryland.

Maryland							
FACILITY_ID	FACILITY_NAME	UNIT_NAME	UNITs	UNIT_DETAIL_SEQ	legal status	operating status	EFFECTIVE_DATE
MDD980829873	UNIVERSITY OF MARYLAND	OPEN BURN	3	2	PI	CC	20000420

Questions:

We have a number of questions we hope you can answer regarding your clean closed/closing sites. The operating status of the facilities will determine which sets of questions are to be answered. We understand that some of this data may be difficult to find but we would really appreciate if you could dig it up for us as it will help us move forward with this project and eventually help EPA update OB/OD closing procedures.

Clean Closed (CC) Facility questions:

1. Did these sites complete clean closure or are they still in the process of seeking to clean close?

2. Did the state officially certify/approve the unit(s) Clean Closed (CC)?

3. What was the volume of waste disposed, frequency (e.g., daily, weekly, monthly, periodically), and years of operation?

4. Was it OB or OD or both?

5. What sampling procedures were used to identify the extent of the contamination, including kick-out and fallout (e.g., geophysical techniques used to identify buried munitions and fragments; trenching; grid, spokes, meandering way, visual, or random sampling of soil/for kick-out; depth; until no more found; and ground water monitoring)?

6. Were components of the unit removed (e.g., any platforms, pans, pads, and liners)?

7. What clean-up procedures and techniques were used to clean up the contaminants (e.g., excavation, soil sifting)?

8. What data was recorded and metrics used to evaluate the extent and levels of contamination?

9. What criteria was used to certify clean closure (e.g., EPA action levels)?

10. What was the total cost to achieve Clean Closed (CC) status?

We plan to have a contractor gather this information on a select number of sites from the states. The purpose of this current effort is to gather information on the status of cleanup at these sites to help us identify which sites have the best information for our contractor to follow up with. Thus, for this effort, we seek answers to questions 1-4 and the last question in each set, and for the remaining questions we seek whether or not good information exists to answer these questions. We hope to receive this information by **July 31st**. Thank you for taking time to assist us with this project. If you have any questions please feel free to reach out to us. Any information that you may be able to provide will be helpful in our project.

Sincerely,

Ana Pena-Molina

703-308-8753

U.S. EPA Headquarters

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